Telecommunications Test Equipment

Ameritec CORPORATION

NetWatch Ameritec

ISO 9001 Ameritec CORPORATION CERTIFIED COMPANY

Ameritec MODEL 820 DIGITAL NETWORK ANALYZER DUAL PORT SS7

1995 Full Line Catalog

Ameritec 1.5MB_CAS DIGIT...

MAIN MENU

A M E R I T E C

AM2 Call Generator

Unit Identification Amerite

Date 89 Dec 92
Wednesday
Time 11:36:29am

Running Set 1

CONFIG
CALL SETUP
RUN PARAM
REPORT

PERSONAL TRANSMISSION TEST SET MODEL AM-48

-16.0   1004

Ameritec PCM/VF CALL ANALYZER ● Model AM8a

>HW1212555121W*818915441#Hhh
00:00.100   WINK 247ms

AM1 Family ... Bulk Call Generators

AM1 Family Overview

The AM1 family are multi port bulk call generators able to originate and terminate telephone calls into telephone switching systems and networks. They are used by switch manufacturers for development and by switch users for acceptance testing, billing verification and network quality assessment. They are available in a variety of interfaces.
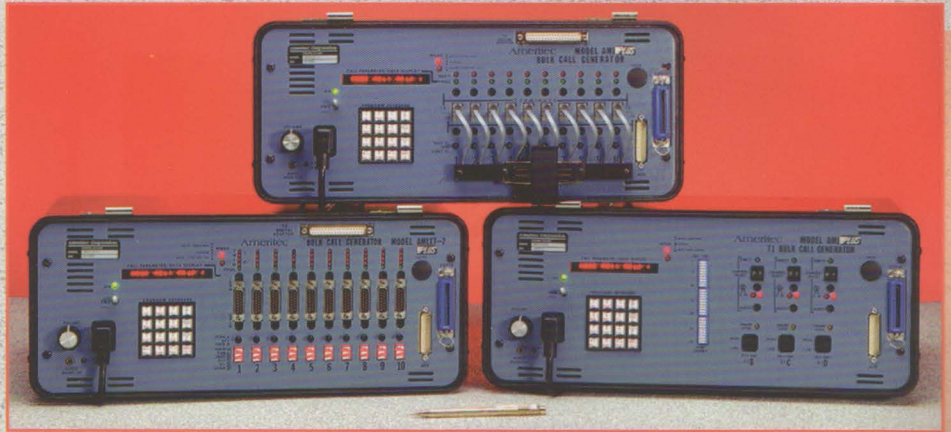
AM1plus-1, AM1plus-2, AM1plus-D

Features 10 originate/10 terminate analog loop/ground start ports. The AM1plus-2 features 10 originate/10 terminate E&M ports. The AM1plus-D features 30 originate/30 terminate channels on 3 T-1 span lines.
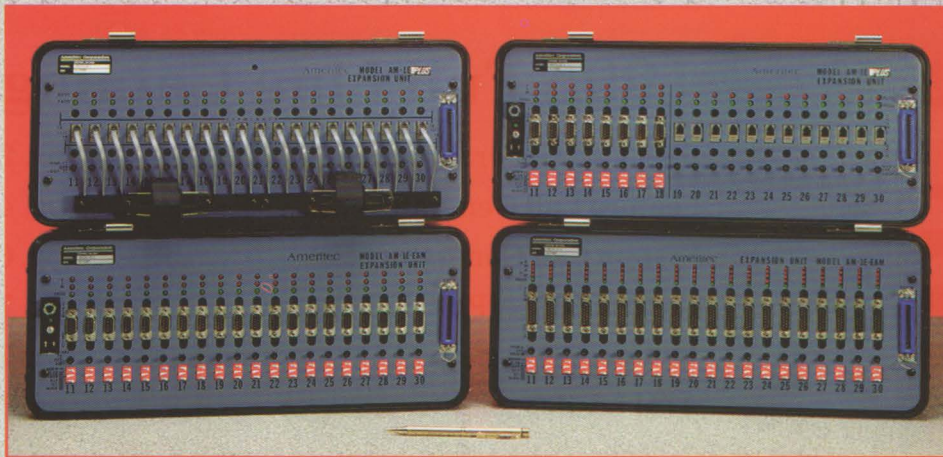
AM1E plus Expansion Units

Expansion units connect to an AM1plus-1 or AM1plus-2 Basic unit and provide an additional 20 originate/20 terminate ports (available models provide various combinations of loop/ground start and E&M ports).

AM1plus -20/20

Features 20 originate/20 terminate analog loop start ports in a single, compact unit.

AM1plus, AM1T1-1, AM1T1-2 T1 Adaptors

Adaptors are for AM1plus-1 and AM1plus-2 Basic units and provide three T1 interfaces per Basic unit.
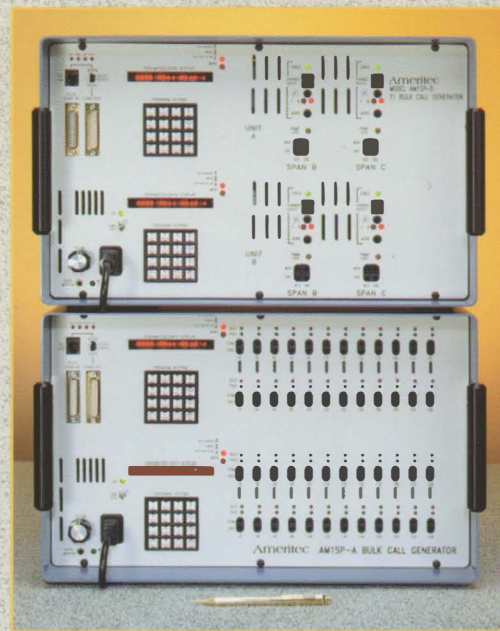
AM1-ISDN/ AM1E-ISDN/2B1Q

Features 10 originate/10 terminate ISDN Basic Rate ports (BRI/BRA, 2B+D, S/T-interface). The AM1E-ISDN Expansion provides an additional 20 originate/20 terminate S/T ports. The 30-0039 2B1Q Adapter Units provide 10 or 30 S/T- (4-wire) to U- (2-wire 2B1Q) interface conversions (multiple NT1).

AM1-SPA/AM1-SPD

The AM1-SPA features 48 originate/48 terminate loop start analog lines. The AM1-SPD features four T1 lines with 48 originate/48 terminate channels.

AM1XT-C

The AM1XT-C provides 10 originate/10 terminate ports that simulate coin- or pay-telephones (coin accept/return and coin deposit). The AM1EXT-C Expansion unit (not shown) provides an additional 20 originate/20 terminate lines.

AM1-DLC

Simulates a SLC®96 Remote Terminal. Four PCM line interfaces can emulate SLC®96 Mode I or Mode II operation.

AM1 Accessories and Options

A wide range of accessories and options are available, including RS232 interfaces, cables, rack mounting kits and transit cases.

Products on this two page spread are shown in scale to each other except for the accessories.

AM2 Niagara™ Family Overview

The Ameritec AM2 Niagara™ family of products allows high volume testing of simulated complex or feature calls. These products are fully user programmable and models are available with analog (loop or ground start), digital (T1, E1), Primary Rate ISDN, Basic Rate ISDN and SS7 interfaces.

AM2-A/AM2E-A

The AM2-A features 64 bi-directional originate or termi-nate analog loop or optionally ground start or meter pulse lines. The AM2E-A Expansion unit adds 96 bi-directional lines.

AM2-D/AM2-De

The AM2-D and AM2-De allow testing of PCM Channel Associated Signaling trunk systems. The AM2-D has four 1.544Mbps T1 spans, with 96 bi-directional originate or terminate channels. The AM2-De has four 2.048Mbps E1 spans, with 120 bi-directional channels.

AM2-DX/AM2-DXe

The AM2-DX and AM2-DXe allow testing of ISDN Primary Rate Interface (PRI/PRA) systems. The AM2-DX has four 1.544Mbps PRI lines (23B+D) and the AM2-DXe has four 2.048Mbps PRI lines (30B+D). AM2-DXe also supports DASS II Protocol.

AM2-S7/AM2-S7e

The AM2-S7 and AM2-S7e allow testing of SS7 networks by simulating SSP functions. Eight signaling links and four voice/data trunks are provided with a variety of electrical interfaces. The AM2-S7 has 1.544Mbps voice/data trunks, and the AM2-S7e has 2.048Mbps voice/data trunks.

AM2-B/AM2E-B

The AM2-B features 32 ISDN BRI U-Interface (2B1Q) lines. Each line supports circuit switched voice and data on the B-channels, and packet switched data on the D- and B-channels.

AM2-NCS Network Call Simulator

The AM2-NCS Network Call Simulator is a test system capable of simulating network traffic towards the customer premises equipment. It is ideal for load and function testing of voice mail systems. It provides up to 60 analog loop/ground start C.O. lines or four T1 or E1 PCM lines or a mixture.

The AM2-NCS is made up of an AM2-D or De (T1 or E1) Bulk Call Generator and two AM2-CB (Channel Bank) units. The AM2-NCS supplies both ringing and dial tone.
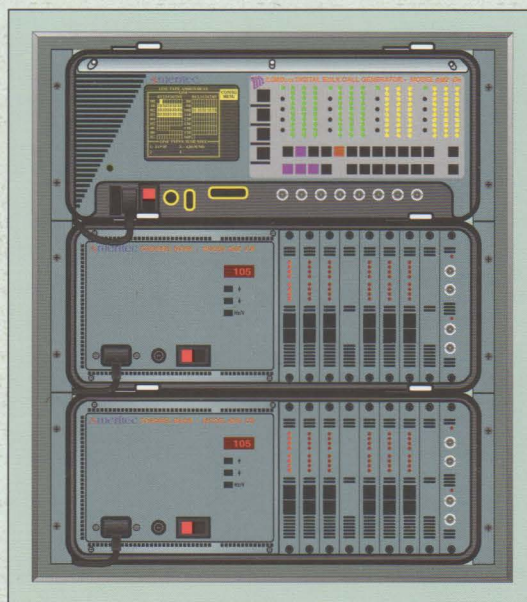
AM2 Options and Accessories

A wide range of options and upgrades are available for AM2 products, including:

High Speed CPU Option for AM2 - Faster user interface, increased memory for user programs.

Ethernet Interface - Remote control AM2 via Ethernet/IEEE 802.3 interface. Includes High Speed CPU option.

Voice Replay Option - Replay pre-recorded speech or tones under program control.

Products on this two page spread are shown in scale to each other except for the accessories.

Crescendo™ Overview

The Ameritec Crescendo™ family of products are call generators that offer full compatibility with AM2 Niagara™ products, while being optimized for high density automated test systems use. Crescendo™ units are controlled via Ethernet interfaces and are designed for rack mounting. Interface types available include analog (loop or ground start), digital (T1, E1), Primary Rate ISDN and SS7.

CRS-A

The CRS-A offers 128 analog lines in a single compact rack mount unit. Options include ground start capability and meter pulse detection.

CRS-D/CRS-De

The CRS-D and CRS-De offer eight digital trunks in a single compact rack mount unit. The CRS-D supports 1.544Mbps PCM trunks, and the CRS-De supports 2.048Mbps PCM trunks. Options include Primary Rate ISDN (23B+D or 30B+D) and SS7 capability.

AM7 Overview

The AM7 is a 20 port non-blocking digital switch. It is capable of simulating the functions of a Central Office or PABX switch on a variety of line and trunk interfaces. The AM7 is user programmable to simulate different switches, allowing realistic testing when an actual switch is not available.

AM7 Interface Options

The AM7 mainframe has ten option card slots for installation of plug-in interface options. Interface options include Analog Lo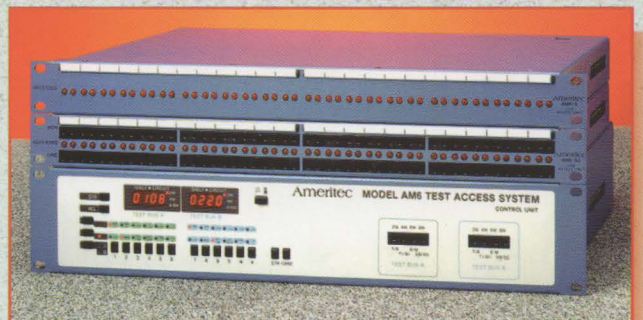op/Ground Start, 2- or 4-wire E&M, 1.544Mbps T1 and 1.544Mbps SLC®96 line cards. Line card types can be mixed in the same unit to simulate multiple switch interfaces.
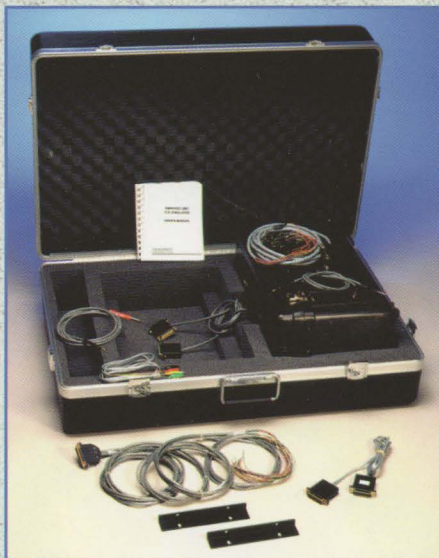
AM7 Accessories

A wide range of accessories and options is available, including interface options, cables, rack mounting kits and transit cases.

AM6 Family... Test Access System

AM6 Test Access System

A modular relay matrix switching system used to provide test access to 2, 4, 6 or 8-wire circuits. Provides two simultaneous accesses on two test buses and allows the circuits to be bridged, split, looped back or frogged (reversed). Optional bantam jack patch panels allow manual patching or reconfiguration of circuits.

Products on this two page spread are shown in scale to each other except for the accessories.
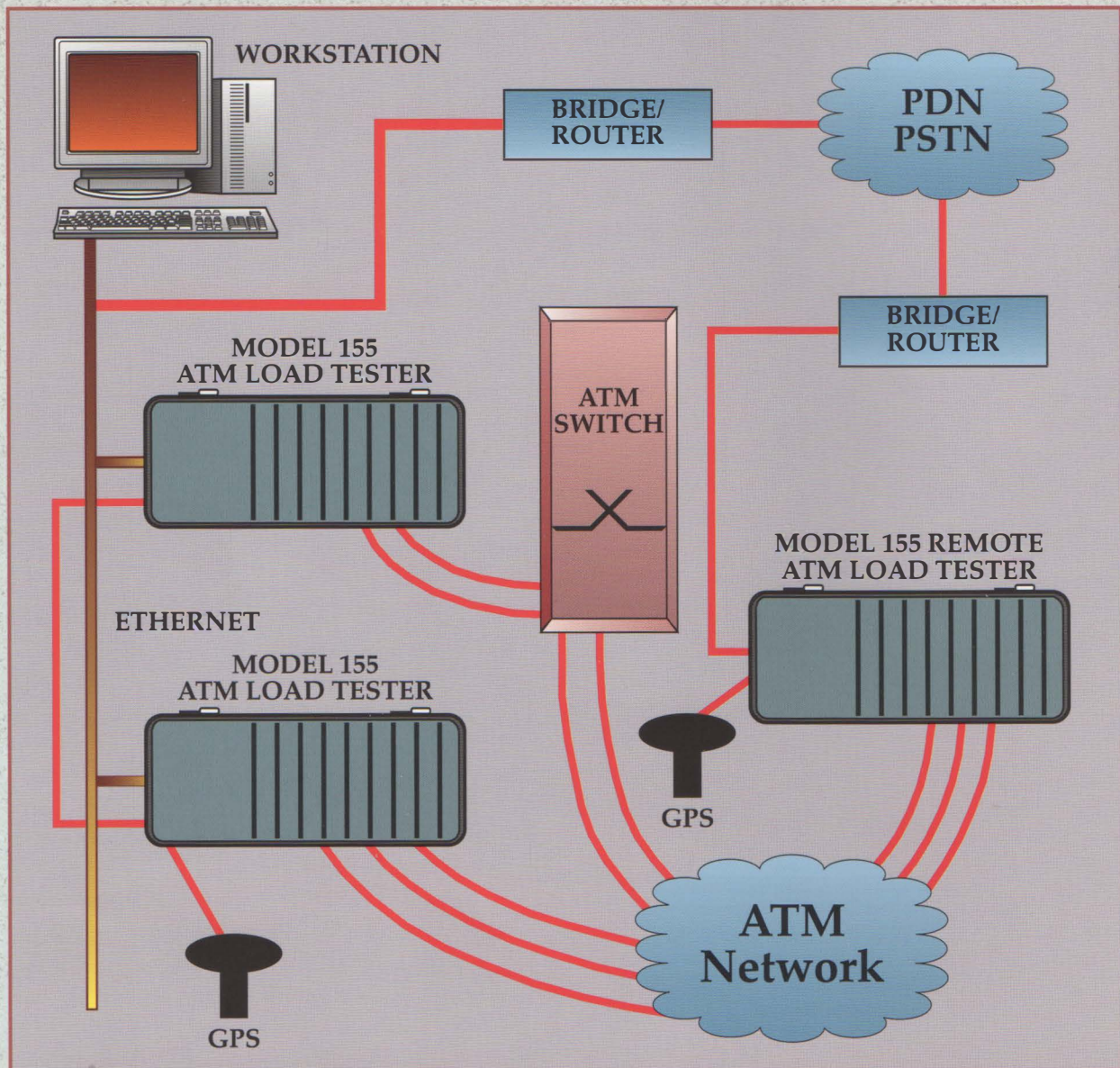
ATM Overview

The Model 155 ATM Load Tester is a high performance, modular test system designed to apply extremely high levels of traffic load to Asynchronous Transfer Mode (ATM) networks and network switches.

Traffic generation is controlled by user programmable scripts, allowing simulation of complex traffic profiles on multiple VCI/VPI channels.

The Model 155 has modular line interfaces, allowing any mix of interfaces to be configured by the user. Optical interfaces (SONET/SDH) and electrical interfaces (DS1, DS3, E1, E3) are supported.

The system is controlled via an Ethernet port using the X-Windows protocol. Any computer or workstation supporting X-Windows can access the system. Multiple users may access multiple Model 155 units across the network, including remote access. Multiple units at the same location can be synchronized through a timing interface, and remote units can be synchronized through optional GPS receivers allowing end-to-end testing.

AM3 Family Overview

Responders are placed at the distant end of 2-wire and 4-wire circuits and are accessed from a centralized location to test those circuits. Most Ameritec responders can be remote commanded by DTMF digits sent over the line under test to produce multiple test tones and other test conditions.
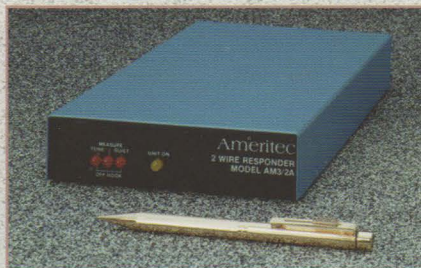

AM3-2A & AM3-2C

The AM3-2A is a 2-wire responder which provides, under DTMF control, milliwatt tone, slope tones, quiet termination, disconnect and the ability to measure the level of a received tone. The AM3-2C provides timed sequences of milliwatt tone and quiet termination with no DTMF control.
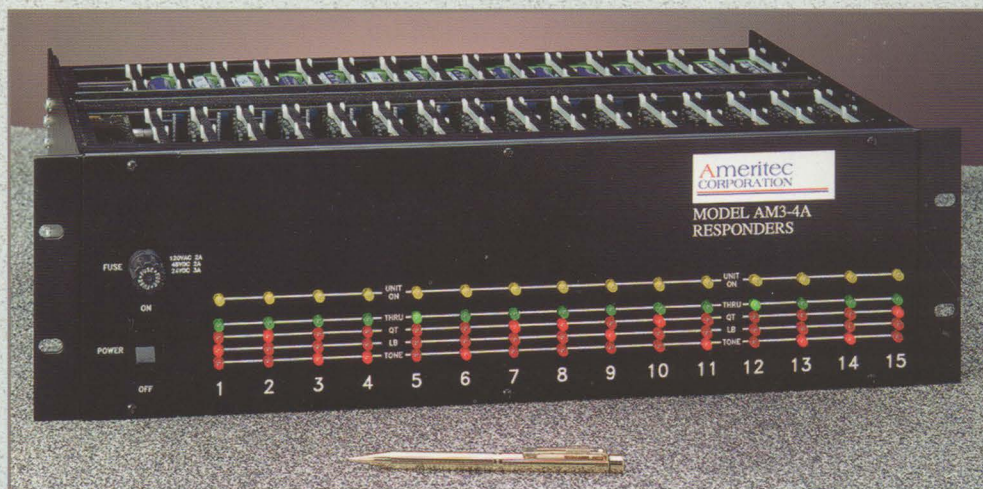
AM3-4A

The AM3-4A is a 4-wire responder which provides, under DTMF control, milliwatt tone, slope tones, 2 tones, 4 tones, quiet termination, loopback and disconnect. The digital option includes sending all marks, all spaces, alternate mark/space, 2047 pattern, 511 pattern and digital loopback.
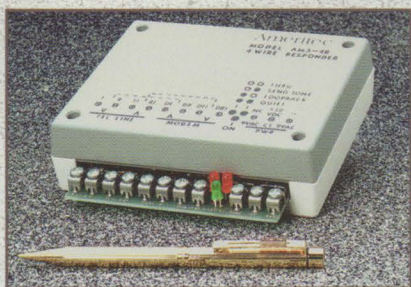
AM3-4B

The AM3-4B is a low cost 4-wire responder which provides, under DTMF control, milliwatt tone, quiet termination, loopback and disconnect.
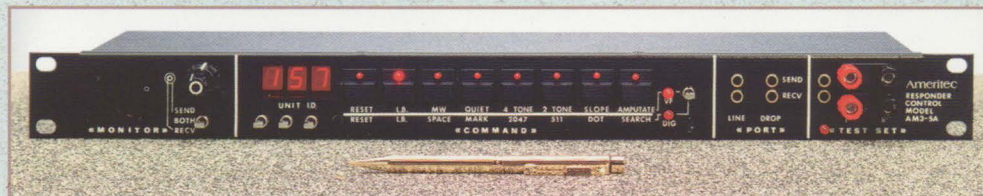

Responder Card File

A responder card file suitable for 19" rack mounting is available for multi-line locations. The card file accommodates up to 15 responder cards and is available with either AC or -48 VDC power supplies.

AM3 Accessories

AM3 accessories include connectorized cables, power supplies for desk top units and detailed instruction manuals.

AM3-5A Responder Controller

The AM3-5A Responder Controller provides centralized addressing and control of AM3-4A or -4B responders. It also has the ability to automatically locate a streaming modem and send a command to the responder to disconnect the modem.

Products on this page are shown in scale to each other.

AM4 Family Overview

The units in the AM4 family are hand-held, battery powered transmission impairment measuring sets (TIMS). They are available in Bell standard (IEEE) and CCITT versions. Some have built in talk/listen/dial "Butt-Set" capability. They are used by telecom craftsmen for maintenance and troubleshooting of transmission facilities.
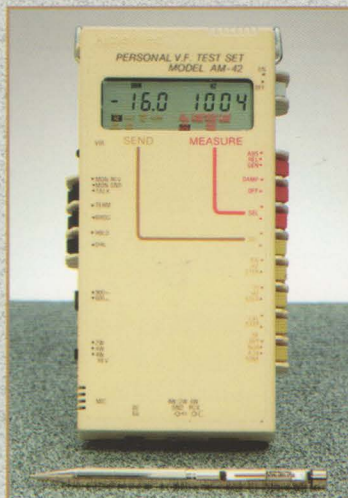

AM-42/AM-42e

These transmission test sets measure noise, level and frequency and can perform basic transmission tests on two and four wire circuits. Operating bandwidth is 200Hz to 5000Hz.
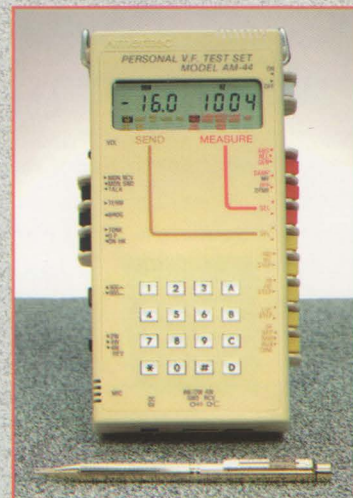
AM-44/AM-44e

In addition to the AM-42 and AM-42e features, these instruments add a keypad for dial pulse, DTMF and MF signaling. Also provided is a built-in "Butt-Set" capability. The AM-44 also has the added P/AR send and measure functions.
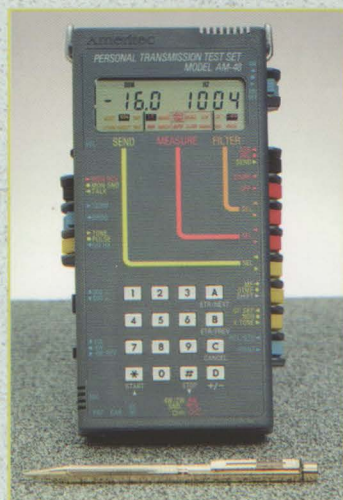

AM-48/AM-48e

The AM-48 and AM-48e add transient tests such as impulse noise, phase and gain jitter, phase and gain hits, and dropouts. Also included is a bandwidth of 200Hz to 20,000Hz, store and recall memory for frequent tests and a printer output.

AM-47 Printer

A hand-held, battery operated, 24 column, impact printer with power supply and rechargeable NiCad batteries. Accepts data output from an AM-48 or AM-48e and may be used to power the AM-48 or AM-48e from the printer's rechargeable battery.
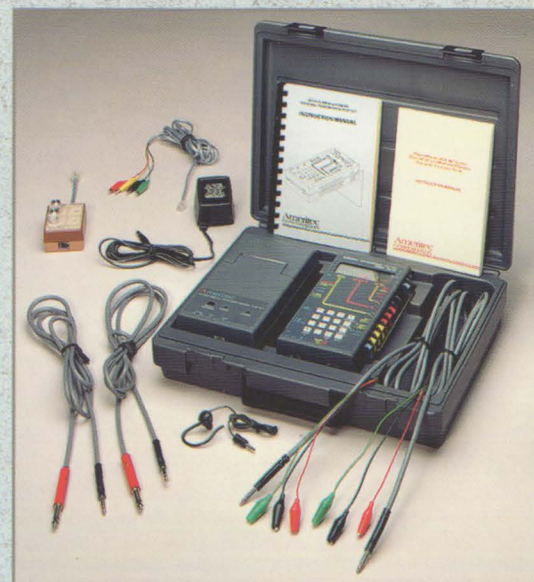
AM-4 Accessories

Accessories include a carry case for the AM-4 test set and AM-47 printer, cables, AC power supply, impedance adapter, earphone and instruction manuals.

Products on this page are shown in scale to each other.

Model 401 Family Overview

The Ameritec Model 401 Personal Tel-Craft Test Set is a hand-held instrument for digital and analog transmission testing of today's high speed telecom voice, data, fax and video circuits.

Due to its small size, battery operation and simple touch screen graphical user interface, it is ideal for field use by telecom installation and repair and special services technicians.
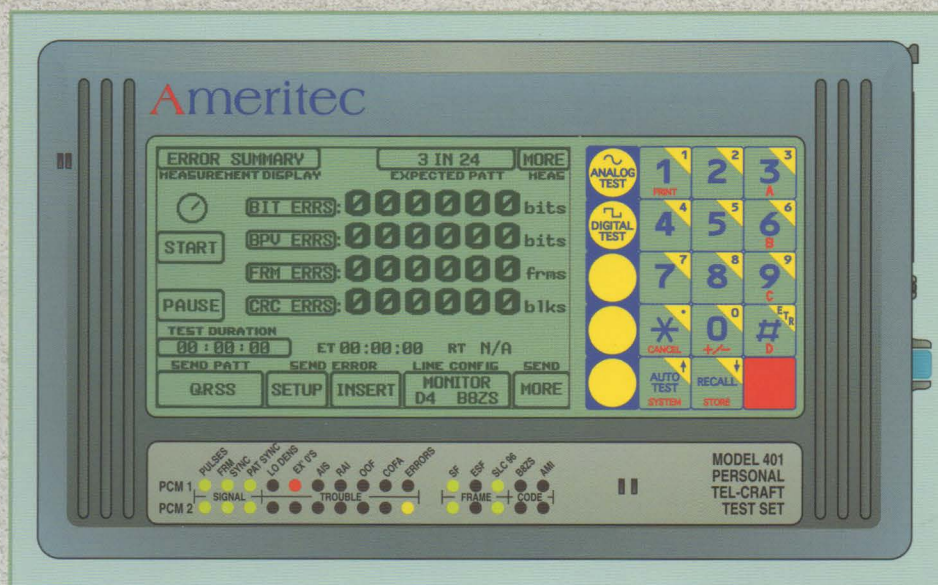
Three Modes, Multifunction in Each Mode

The 401 is really three multi-function test sets in one.

It is a dual port digital test set:

- Fractional and Full T1 (or E1) BERT
- Drop and Insert of T1 (or E1)
- T1 Test Set
- SLC®96 Monitor
- T1 - CSU Emulate/Control

It is a 2-wire and 4-wire analog test set:

- Comprehensive Transmission Impairment Measurements Tests (TIMS) up to 200kHz
- Loop Voltmeter
- DTMF and MF Digit Decoder

It is an analog butt set:

- Pulse, DTMF, MF(R1) Dialing
- Ringer
- DC Hold Circuit
- Speakerphone Talk/Listen

Wide Bandwidth

Its analog bandwidth of 200kHz allows it to be used to qualify ISDN BRI and HDSL circuits as well as voice, fax and broadcast circuits.

Its digital bandwidth of 1.5 MB (2.0 MB for Model 401e) allows it to be used to test T1 (or E1) PCM circuits as well as fractional T1, SLC®96 and DDS circuits.

The Ideal Craft Test Set

Telecom field technicians need no longer be burdened with several separate test sets. The Model 401 is about the size of a double video cassette and will fit easily into a tool box or a brief case.

It is powered by a disposable or a rechargeable battery pack which can be recharged by wall adapter or vehicle cigarette lighter.
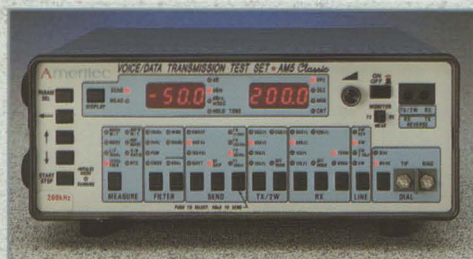
Rugged, simple and easy to use.

A complimentary unit, the Model 401e, compatible with E1 (2.0 MB) circuits is also available. The Model 401e meets CCITT test specifications.

AM5 Family Overview

Ameritec's AM5 family of wideband transmission impairment measuring sets offers you choices across the full range of 2-wire and 4-wire transmission measurements plus a highly versatile signal generator in a compact portable unit. The AM5 Classic and AM5XT conform to North American IEEE 743-1984 Standards and the AM5e Classic and AM5eXT conform to international CCITT recommendations.

AM5XT/AM5eXT

The AM5XT (IEEE 743) and the AM5eXT (CCITT) perform every standard transmission test worldwide and provide dial pulse signaling, DTMF signaling, MF signaling, monitor, talk and RS232 remote control capabilities. Operating bandwidth is 20Hz to 120kHz.

AM5XT-200/ AM5eXT-200

Functionally identical to the AM5XT and the AM5eXT, these extra wideband transmission test sets have an extended bandwidth of 20Hz to 200kHz which is ideal for qualifying subscriber circuits for BRI ISDN, HDSL and 56/64 Kbps data.
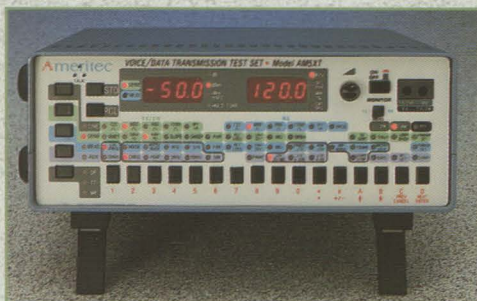

AM5 Classic/ AM5e Classic AM5 Classic-200/ AM5e Classic-200

A perfect balance of features versus cost, the Classic instruments provide level, noise and frequency measurements. Simple selection keys are provided for all measure, filter, send and termination functions. Options include bandwidths from 20Hz to 120kHz and from 20Hz to 200kHz.

DDS Loopback Test Set with SW56

The DDS Loopback Test Set provides CSU loopback, DSU non-latching loopback, DSU latching loopback, and a manual (or forced) loopback. It can also be used on switched 56Kb circuits. Generates straightaway test patterns 511, 2047 and SP1 through SP5. Supports secondary channel and data rates of 2400, 4800, 9600, 19.2K, 56K, and 64K bits per second. Operates on AC power or internal, rechargeable NiCad batteries.

AM5 Signaling Adapter

Full demarc testing is provided by the AM5 Signaling Adapter in combination with any member of the AM5 family. Signaling capabilities include loop start, ground start, DID and Types I, II, and III E&M. Also provided is a ring generator, 24 and 48 VDC loop supply voltages, and a simulated 1240 ohm loop resistance.

AM5 Accessories

Accessories include a soft case for the AM5 instrument with pockets for test cables, printer cables, DDS Test Set, Signaling Adapter, AM-47XT printer and instruction manual. Other options include rack mount panel, rack mount shelf and 310 jacks.
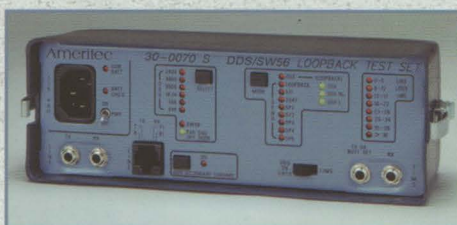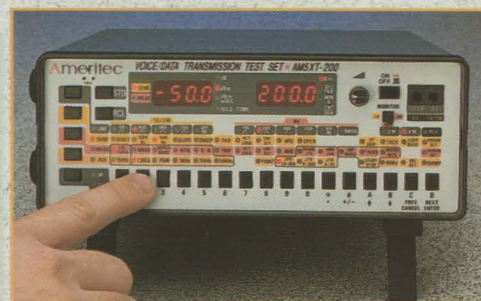

AM-47XT Printer

Connects to the optional RS232 port of the XT members of the AM5 family. Can be used to print a hard copy of any test setup and/or measurement result.

AM8 Family Overview

The AM8 family of call analyzers covers world-wide requirements for non-intrusive monitoring and emulation of T1 and E1 Channel Associated Signaling circuits and analog lines and trunks. Decoded and analyzed digits and events are timestamped to the millisecond and displayed or output to a printer. Programmable thresholds allow automatic problems screening and printed exception reports.

AM8a

Monitors, emulates and analyzes T1 Channel Associated Signaling circuits and analog loop start/ground start and DID lines plus 2-wire and 4-wire E&M trunks. Dial pulse, DTMF, MF(R1) and SF signaling are supported. Provides monitoring and analysis of AT&T SLC®96 Mode I and Mode II circuits.

AM8e

Monitors, emulates and analyzes E1 Channel Associated Signaling circuits, analog loop start lines and, optionally, 2-wire and 4-wire E&M trunks. Dial pulse, DTMF, MF(R1) and MF(R2) signaling are supported. The AM8e provides user-programmable signaling protocols such as CCITT #5, to accommodate worldwide signaling variations.

AM8e T1 Adapter

Allows the AM8e to monitor or emulate 1.544Mbps T1 lines. Also provides T1 µ-law to E1 A-law conversion.

AM8e E&M Lid Adapter

Offers convenient analog E&M signaling capabilities. Supports 2-wire and 4-wire E&M Types I through V plus 4-wire E&M^2 and 4-wire Phantom E&M.

AM8 Accessories

Accessories include a soft case for the AM8 instrument with pockets for test cables, adapters and instruction manuals. Other options include rack mount panel (AM8a) and rack mount shelf (AM8a or AM8e).

Products on this two page spread are shown in scale to each other except for the accessories.

Model 800 Family ... Digital Network Analyzers

800 Family Overview

The Ameritec Model 800 products are a family of hand held, battery operated, Digital Network Analyzers with sophisticated protocol analysis, emulation and statistics capabilities for use in the installation and maintenance of modern digital networks.

Model 815

The Model 815 is a single port ISDN PRI (23B+D) monitor and emulator. Standard features include protocol analysis and emulation for a variety of PRI protocols (L1, L2 and L3), Speech Monitor, and BERT capability including G.821 Analysis and Graphical display.

Model 810/810e Model 820/820e

These units are SS7 protocol analyzers. Models 810/810e feature a single monitoring port, while Models 820/820e feature dual monitoring ports. Models 810 and 820 are for 1.544Mbps T1 or optionally DS0A circuits, while Models 810e and 820e are for 2.048Mbps E1 circuits. Standard features include SS7 MTP, TUP and ISUP protocol decode and BERT capabilities. Optional features include SS7 Layer 4 SSCP/TCAP protocol decode, ISDN PRI protocol decode, Speech Monitor, CAS ABCD bit trace and G.821 Analysis and Graphical display for BERT results.

Model 830e

The Model 830e is a dual port ISDN PRI (30B+D) and ISDN BRI (2B+D S/T interface) monitor and emulator. Standard features include protocol analysis and emulation of a variety of PRI and BRI protocols (L1, L2 and L3), Speech Monitor, and BERT capability including G.821 Analysis and Graphical display.

Model 800 Accessories

Available accessories include a soft carrying case with pockets for cables, power supply/battery charger, printer and instruction manual.

Products on this page are shown in scale to each other except for the accessories.

NetWatch Overview

NetWatch is the ideal solution to the problem of providing network wide, non intrusive performance monitoring of switched voice and dedicated data circuits.

Identifies a variety of circuit faults in real-time. Each system reports level, noise, and line fault problems. Hung circuit and answer delays are also reported. Includes a complete set of traffic and circuit usage reports. System can be remotely and locally accessed.

NetWatch 48P

Fully portable, 48 line version of NetWatch system. All standard features and options of the 144 and 48A are available. Housed in a convenient carrying case, the 48P weighs less than 15 lbs.
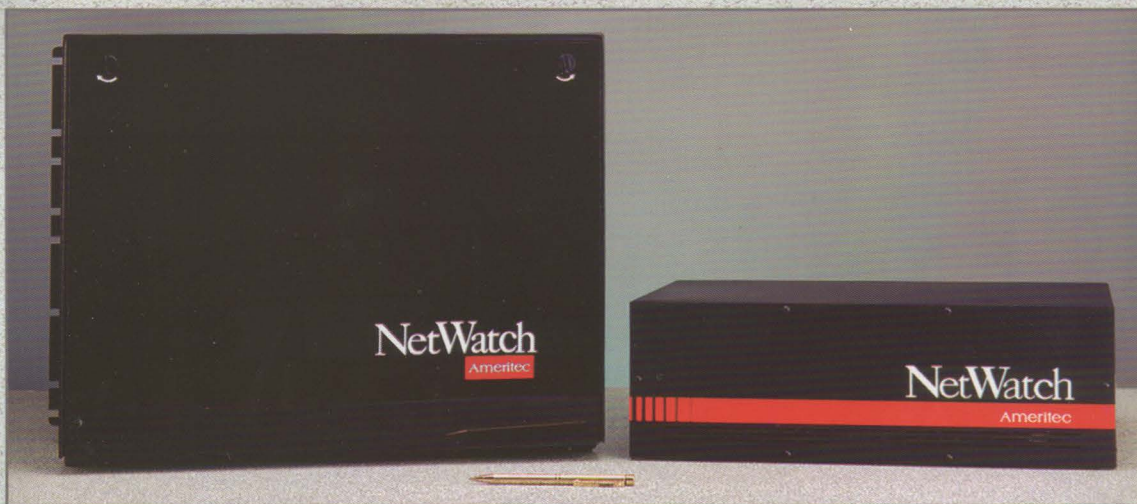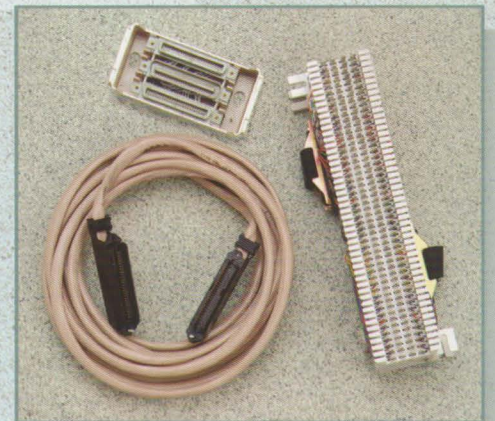
NetWatch 144 and 48A

Shown are Model 144 and Model 48A systems. Model 144 can accommodate a total of 144 lines with six line cards. Model 48A can support two line cards for a total of 48 lines. Analog and DS-1 lines cards are available.

NetWatch DS-1 Accessories

DS-1 installation kit provides proper impedance matching and 50 ft. cable to NetWatch system.

NetWatch Analog Accessories

Analog installation kits include cross connection and bridging adapter components.

Products on this page are shown in scale to each other.

The Company

Ameritec Corporation is a successful established company specializing in the design, manufacture and sale of telecommunications test equipment.

Since its founding in 1980, Ameritec has committed itself to providing customers with high value, high quality, user friendly solutions to telecom transmission and switch testing problems.

We believe our products will perform better, provide greater benefit, last longer and be easier to use than those of our competitors. We achieve this ever broadening goal by constantly exploring and using advanced technologies, design and manufacturing techniques.

The company's headquarters, development and manufacturing facilities are located in Southern California with sales/service offices throughout the world. We are an ISO 9001 certified company.

Ameritec is dedicated to serving the worldwide telecommunications industry by providing competitively priced, state-of-the-art test equipment that is supported by the finest in marketing, engineering development and customer service.

Detailed product literature and technical data is available for all Ameritec products listed herein. Contact the Ameritec Sales Office listed below or our factory for more information.